LASYSTEMS - Brusselsesteenweg 208 - 1730 Asse - Belgium
Phone: +32-2-4531312 - Fax: +32-2-4531763
E-mail: info@lasystems.be

ASUS Z87M-Plus (90MB0EF0-M0EAY5)

Intel Z87, Socket 1150, 4xDIMM DDR3, PCIe, 6xSATA3, Raid 0/1/5/10, Gigabit Ethernet, 8-ch, mATX

PDF generated on: 22 June, 2015

Price details:

Price excl. VAT: 102.53 €
Eco fees: 0.00 €
VAT 21 %: 21.53 €

Product details:

Product code: 90MB0EF0-M0EAY5
EAN: 4716659553472
Manufacturer: ASUS

124.06 €

* VAT included

Product is discontinued. You can not order it anymore.

Micro-ATX Z87 features great performance potential and high-endurance 5X Protection
- ASUS 5X Protection - All-round protection provides the best quality, reliability, and durability;
- USB BIOS Flashback - Simple plug and press hardware-based BIOS flashing;
- Fan Xpert 2 - Comprehensive controls for the perfect cool and quiet balance;
- USB 3.0 Boost (UASP Support) - 170% faster transfer speeds than traditional USB 3.0;
- New UEFI BIOS - Friendlier, easier, and more intuitive with helpful info added.

All-round protection provides the best quality, reliability, and durability
ASUS motherboards guard your PC with 5X Protection. We use quality components like DIGI+ VRM digital power design for precise CPU power on demand, ESD units tested to strict standards that eliminate electrostatic interference, and resettable fuses around DRAM slots to prevent overcurrent and short-circuit damage. We also use corrosion-resistant back I/O shields, all examples of ASUS providing the best possible reliability and durability.

Precise power control and long-lasting stability
Voltage regulator modules (VRMs) are among the most essential motherboard components. A good VRM intelligently delivers CPU power based on actual needs at any given time. ASUS was first with digital power design featuring faster sensing and response to deliver precise CPU power on demand. This great accuracy reduces energy waste and of course improves system stability thanks to more consistent delivery.

Short-circuit damage prevention
Onboard resettable fuses prevent overcurrent and short-circuit damage. This extends beyond I/O ports to DRAM to safeguard system and device lifespan.

Strong ESD protection for extended component lifespan
Electrostatic discharges (ESD) can happen suddenly, and their damaging effects are often underestimated. ASUS ESD Guards offer an active protective circuit design that ensures electrostatic discharges are properly grounded, providing greater component longevity.

2.5X longer lifespan with excellent durability
ASUS high-quality solid state capacitors assure a 5,000-hour lifespan, equivalent to 2.5 times longer than traditional capacitors. All capacitors pass testing under temperatures as high as 105 degrees centigrade and meet Japanese industrial standards to provide excellent durability and enhanced thermal capacity.

3X more durable corrosion-resistant coating
ASUS motherboard back I/O panels are made from strong and corrosion-resistant stainless steel, which is bonded with a thin layer of chromium oxide to enhance anti-corrosive properties. Passing 72-hour spray salt endurance tests, ASUS stainless steel back I/O panels have a usage life three times longer compared to ordinary panels.

Exclusive EZ Mode adds useful info to become even easier
Media-renowned UEFI BIOS from ASUS provides the smoothest mouse-controlled graphical BIOS, and now features more intuitive functions to quickly take you to favorite BIOS pages and frequently-accessed settings through custom shortcuts. You can even write quick notes in-BIOS for future reference, view an activity log of setting changes and modifications, and rename SATA ports. EZ Mode has a whole new look, upgraded with extra-friendly capabilities like detailed fan controls, XMP profile settings, SATA information, and fast clock adjustment. Together, these perfect your

BIOS experience.

Fast Clock Adjustment
Easily change the time and date in EZ Mode using the mouse.

EZ XMP Settings
Quickly apply XMP settings in UEFI BIOS EZ Mode, achieving better DRAM performance.

EZ Fan Settings
As demanded by the community, detailed fan controls come to EZ Mode so you can switch fan profiles for quick cooling and noise-level supervision.

SATA Information
Displays each SATA port details for you to easily recognize devices.

Get all your favorite functions on one page
F4 or right click to add settings to My Favorites under Advanced Mode, which cuts time spent on searching and further speeds up system tuning.

One press to apply and access frequent settings
Now you can customize your own shortcut log by pressing F4 or right clicking to create shortcuts to frequently-used settings. Instantly access them by simply hitting the F3 hotkey.

Quick Note
You no longer need to have a pen and paper notepad around. Quick Note works inside the BIOS so you can just type remarks and ideas to help you remember important settings info and save time on trial and error.

Last Modified
Always forget those important BIOS changes you did? This friendly function creates a tuning log to track your BIOS settings history, which can be saved onto a USB drive.

SATA Port Renaming
You can rename your SATA ports for easy identification, including by usage scenario. Get greater convenience and spend less time on finding the right devices when you want to change settings.

Comprehensive controls for the perfect cool and quiet balance
Seeing an opportunity for more fine-tuned control, hardware-level ASUS Fan Xpert 2 featuring Fan Auto Tuning, providing an tailored fan speed setting for each fan with the exclusive, automatic fan speed detection to achieve the best balance of cooling performance and low noise. It even provides a "RPM Fixed Mode" for users who wish to reduce noise levels to near 0dB with a specific fan speed control.

Fan Auto Tuning Mode
Scans fan parameters through exclusive automatic speed detection to provide custom settings for each fan with a single click. This achieves the best cooling for your components beyond just the mere number of fans in your case. Fan Xpert 2 provides individual data and control for each fan connected to your motherboard as well as built-in fan profiles to deliver cooling that is as automated or as customizable as you need it to be.

RPM Fixed Mode
Fan Xpert 2 includes an RPM Fixed Mode for users who wish to reduce noise levels to near 0dB with highly specific fan speed control. It reacts to system loads for greater response.

Informative fan controls
Delivers complete information that allows you to take advanced control over each fan.

World's 1st USB 3.0 UASP support - instantly 170% faster
Complete USB 3.0 solution - performance boost under Turbo Mode or UASP Mode for most USB devices.
Simple plug and boost - auto detection design ensures best performance.

Easy real-time overclocking
This friendly tool allows you to overclock without exiting or rebooting the OS. Its clear interface makes overclocking with just a few clicks effortless thanks to auto tuning functionality. ASUS OC profiles in TurboV EVO provide the best settings for different scenarios.

Real-time network bandwidth management
One click to prioritize network traffic for applications you're currently using or set up favorite profiles to run at specific times. Avoid network congestion, speed up downloading, and make sure online gaming runs optimized, all through an intuitive user interface.

PCI Express 3.0
PCI Express 3.0 uses improved encoding that provides twice the performance of PCI Express 2.0. Total bandwidth for

an x16 link reaches 32GB/s, delivering unprecedented data speeds combined with the convenience and seamless transition offered by complete backward compatibility.

Double USB access, double the convenience
ASUS facilitates USB 3.0 accessibility for both the front and rear panel. Experience the latest plug n play connectivity at speeds up to 10 times faster than USB 2.0. Our motherboards afford greater convenience with high speed connectivity.

Twice the speed
ASUS provides SATA 6.0 Gb/s ports with enhanced scalability, faster data retrieval, and double the bandwidth of SATA 3Gb/s.

Simple plug and press hardware-based BIOS flashing
Hardware-level USB BIOS Flashback allows users to update to new UEFI BIOS versions even without a CPU or DRAM installed. Just plug in a USB flash drive containing the BIOS file and press the RESET button for 3 seconds with the power supply connected. Hassle-free updating for ultimate convenience!

Enhanced memory compatibility: save time on trial and error
Memory issues can be difficult to diagnose and even harder to fix or work around. If RAM problems are preventing your system from booting, MemOK! helps by automatically loading failsafe settings to enable basic functionality with a simple push of a button on the motherboard. This troubleshooting feature saves you time and annoyance, and adds to the confidence of DIY builders.

Easy and safe on fingers
Unlike other I/O shields with their sharp edges, the exclusive Q-Shield is soft and pliable to protect your hands from cuts. Ease of install and safety are always first!

Easy memory removal
Even if you work with a smaller case, plugging in memory is easy with one-sided clips that are right at the edge of the board and always accessible. Just push down on the clip and push or pull RAM modules in or out - couldn't be simpler!

Q-Slot
Effortless PCI Express component removal
Press the Q-Slot clip lightly, and graphics cards just pop out. The large winged clip is easy to reach so you don't have to struggle with installing or removing even the biggest graphics cards.

Multiple startup options
Thanks to ASUS Windows 8 hardware optimization, ASUS Boot Setting provides better flexibility in customizing your PC's startup process. You can shorten system boot-up time to 2-seconds for a smoother user experience under Windows 8, and even previous versions of Windows. Also, you can enter the BIOS directly with one click through a user-friendly interface, and quickly select your preferred system boot up method: either get to the OS in seconds or opt for regular boot up. Whatever your choice, settings are saved and persistent, with no need to choose every time you power on.

Handy system monitoring
Popular ASUS real-time system monitoring software now available for Windows 8. It helps you supervise your entire PC through a live tile on the Windows 8 start screen, and make quick adjustments. Probe II Sense is a free app available from the Windows Store.

One-stop access to innovative ASUS features
ASUS AI Suite 3 offers a brand new user experience through a clearer and more attractive interface with support for larger monitors. It consolidates all exclusive ASUS features into one simple-to-use package, allowing you to supervise overclocking, energy consumption, fan speeds, voltages and more. This all-in-one app offers diverse and easy to use functionality, with no need to switch back and forth between different utilities.

All-round energy efficiency and detailed CPU wattage settings
Tap into the world's first real-time PC power saving chip through the AI Suite 3 utility. Get total system-wide energy optimization by automatically detecting current PC loadings and intelligently moderating power consumption. It can directly reduce CPU wattage to an indicated level on demand and manually switch to Max Power Saving Mode for further energy savings, creating a more efficient PC.

2X faster multi-mode charging for a wide range of smart devices
With a dedicated onboard controller, quick-charge all your smart devices, including smartphones and tablets. All charge up to 2X faster than standard USB, even when the PC is powered off or in sleep/hibernate modes. It's all done via the friendly AI Suite 3 interface, which you'll get familiar with very quickly.

Restore corrupted BIOS data from USB storage
ASUS CrashFree BIOS 3 allows users to restore corrupted BIOS data from a USB flash drive or support CD containing a BIOS file. This utility saves you the cost and hassle of buying a replacement BIOS chip.

Easy BIOS updates from USB outside the OS

Quickly update your BIOS from a USB flash drive before entering the OS. It only takes a few clicks, with no floppy disk or an OS-based flash utility.

Discover future visual experiences
Following up on popular 1080p full HD, 4K Ultra HD is the next big thing, and you're ready for the upgrade thanks to integrated graphics that natively support up to 4096 x 2160 via HDMI or DisplayPort. That's four times the pixel count of 1080p (1920 x 1080), offering incredible visual clarity, detail, and realism.

Work with up to 3 displays
Connect up to three independent monitors at once using video outputs such as DisplayPort, Mini DisplayPort, HDMI, DVI, or VGA. Choose your outputs and set displays to either mirror mode or collage mode.

Quad-GPU CrossFireX support
Features the Intel® Z87 platform to optimize PCI Express allocation in multi-GPU CrossFireX, giving you brand-new gaming enjoyment.

CPU and chipset Intel features
Intel® LGA1150 4th Generation Core i7/Core i5/Core i3/Pentium®/Celeron® Processors Ready
This motherboard supports Intel® 4th generation Core i7/i5/i3/Pentium®/Celeron® processors in the LGA1150 package, with iGPU, memory and PCI Express controllers integrated to support onboard graphics output with dedicated chipsets, 2-channel (4 DIMM) DDR3 memory and 16 PCI Express 3.0/2.0 lanes. This provides great graphics performance. Intel® 4th generation Core i7/i5/i3/Pentium®/Celeron® processors are among the most powerful and energy efficient CPUs in the world.

Intel® Z87 Express Chipset
The Intel® Z87 Express Chipset is a single-chipset design that supports socket LGA1150 4th generation Intel® Core i7/i5/i3/Pentium®/Celeron® processors. It provides improved performance by utilizing serial point-to-point links, allowing increased bandwidth and stability. Additionally, Z87 provides a maximum 6 USB 3.0 ports and 6 SATA 6Gb/s ports for faster data retrieval. Moreover, the Intel® Z87 Express Chipset also supports iGPU functions, letting users enjoy the latest Intel integrated graphics performance.

SSD speed with HDD capacity
Uses an installed fast SSD (min18.6GB available capacity required) as a cache for frequently-accessed data. Key benefits include reduced load and wait times, and lower power consumption through the elimination of unnecessary hard drive spin. This technology combines SSD performance with hard drive capacity, operating up to 6X faster than a hard drive-only system.

Auto application refresh and shorter wait times
Your computer can receive web updates with fresh content for selected applications, even when the system is in sleep mode. This means less time waiting for applications to update and sync with the cloud, leading to a more efficient computing experience.

Intel® Rapid Start Technology
Allows your computer to quickly resume from a low-power hibernate state in seconds. Saving your system memory to the designated SSD, it provides your computer a faster wake-up response time, while still keeping energy use low.

GreenASUS
Motherboards are EU Energy-related Products (ErP) ready, which requires products meet high efficiency standards with regards to energy consumption. This is in line with the ASUS vision of creating environmentally-friendly and energy-efficient products through design and innovation that reduce the carbon footprint of products and thus mitigate ecological impact.

Main specifications:

Memory

Supported memory types:	DDR3-SDRAM
Memory slots type:	DIMM
Memory channels:	Dual
Non-ECC:	Y
Supported memory clock speeds:	1333, 1600, 1866, 2000, 2133, 2200, 2400, 2600, 2666, 2800 MHz
Supported memory module capacities:	8GB
Maximum internal memory:	32 GB
Unbuffered memory:	Y
Memory slots:	4

Processor

Processor family:	Intel

Compatible processor series:	Celeron, Core i3, Core i5, Core i7, Pentium
Processor socket:	Socket H3 (LGA 1150)

Internal I/O

USB 2.0 connectors:	3
USB 3.0 connectors:	1
Supported hard disk drive interfaces:	Serial ATA III
S/PDIF out connector:	Y
CPU fan connector:	Y
Number of COM connectors:	1
ATX Power connector (24-pin):	Y
Number of chassis fan connectors:	2
Front panel audio connector:	Y
TPM connector:	Y
Number of SATA III connectors:	6
EPS power connector (8-pin):	Y

Back panel I/O ports

USB 2.0 ports quantity:	2
USB 3.0 ports quantity:	4
Ethernet LAN (RJ-45) ports:	1
PS/2 ports quantity:	1
Headphone outputs:	1
Microphone in:	Y
S/PDIF out port:	Y
VGA (D-Sub) ports quantity:	1
DVI-D ports quantity:	1
HDMI ports quantity:	1

Networking

Ethernet LAN:	Y
LAN controller:	Realtek 8111GR
Ethernet interface type:	Gigabit

Performance

Component for:	PC
Motherboard chipset family:	Intel
Motherboard chipset:	Intel Z87
Motherboard form factor:	Micro ATX
Audio output channels:	7.1
RAID levels:	0, 1, 5, 10
Audio system:	Realtek ALC887
Windows operating systems supported:	Windows 7 Home Basic, Windows 7 Home Basic x64, Windows 7 Home Premium, Windows 7 Home Premium x64, Windows 7 Professional, Windows 7 Professional x64, Windows 7 Starter, Windows 7 Starter x64, Windows 7 Ultimate, Windows 7 Ultimate x64, Windows 8, Windows 8 Enterprise, Windows 8 Enterprise x64, Windows 8 Pro, Windows 8 Pro x64, Windows 8 x64

Graphics

Maximum graphics adapter memory:	1024 MB
Parallel processing technology support:	Quad-GPU CrossFireX
Maximum resolution:	4096 x 2160 pixels
On-board graphics adapter:	Y

Expansion slots

PCI Express x1 slots:	2
PCI Express x16 slots:	2
PCI Express slots version:	2.0, 3.0

BIOS

BIOS type:	UEFI AMI
BIOS memory size:	8 MB
ACPI version:	4.0a
Clear CMOS jumper:	Y

Weight & dimensions

Width:	244 mm
Depth:	213 mm

Packaging content

Cables included:	SATA

Drivers included:	Y
Quick installation guide:	Y

*PLEASE NOTE: Every effort has been made to ensure the accuracy of all information contained herein. Lasystems makes no warranty expressed or implied with respect to accuracy of the information, including price, editorials or specifications. Lasystems or its suppliers shall not be liable for incidental, consequential or special damages arising from, or as a result of, any electronic transmission or the accuracy of the information contained herin, even if Lasystems has been advised of the possibility of such damages. Product and manufacturer names are used only for the purpose of identification.